RECENT ADVANCES IN THE ENDF/B LIBRARY

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Overview of recent advances in the US evaluated nuclear reaction data library, ENDF/B, as embodied in current and forthcoming releases is given. The Cross Section Evaluation Working Group (CSEWG) that maintains the library issued it latest version, ENDF/B-VI release 8, in October 2001.

The current effort of the CSEWG is focusing on the development of a new version of the library, ENDF/B-VII, scheduled for release in December 2005. Among its entirely new features is inclusion of 160 photonuclear evaluations. Majority of new and improved evaluations, in particular in the actinide region, comes from LANL. Contributions from ORNL focus on neutron resonance data, while BNL leads effort to improve evaluations for fission products. Strong emphasize is given to data validation process.

We will attempt to convey the excitement of new advances in the database, as grounded in recent experiments or model calculations, and also discuss the users of the database and the applications that are motivating the work.

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